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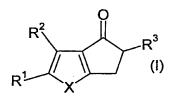
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### (54) Title: PREPARATION OF HETEROCYCLIC KETONES



$$R^1$$
  $X$   $O$   $R^3$   $(Ia)$ 

$$R^3$$
  $O$   $O$   $R^3$   $(IV)$ 

(57) Abstract: The present invention relates to a process for preparing heterocyclic ketones of the formula (I) and (Ia), by reacting a heterocyclic compound of the formula (II), with an  $\alpha$ , $\beta$ -unsaturated carboxylic acid of the formula (III), or with its anhydride of the formula (IV), where  $R^1$  is hydrogen or a  $C_1$ - $C_{40}$  carbon-containing group,  $R^2$  is hydrogen or a  $C_1$ - $C_{40}$  carbon-containing group, or  $R^1$  and  $R^2$  together form a cyclic ring system,  $R^3$  is a  $C_1$ - $C_{40}$  carbon-containing group and X is an element of the 16th group of the Periodic Table or is a divalent nitrogen group -(N- $R^4$ )-, where  $R^4$  is an electron-withdrawing radical which is selected from the group consisting of perhalogenated  $C_1$ - $C_{40}$  carbon-containing radicals and  $C_1$ - $C_{40}$  organosulfonyl groups.